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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,008	11/15/2000	Johann Engelhardt	102847-28	1885

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EXAMINER

FERNANDEZ, KALIMAH

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,008

Applicant(s)

ENGELHARDT, JOHANN

Examiner

Kalimah Fernandez

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 2-4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. It is not understood if applicant intends two separate and distinct radial directions (5) and (6) or if radial directions (5) and (6) are the same. In order, to ensure the readers ability to sufficiently assess the metes and bounds of the applicant's claimed invention, clarification is required.
4. A similar issue arises in the claim language of claim 3, which recites a further axis (7). In claim 3, applicant refers to axis (7), which appears to be depicting axis (4) in fig. 1. If applicant intended to describe a different axis (7), it is advisable that more concise claim language be employed.
5. In regards to claim7, it is not understood what the applicant intends to claim by the phrase "has a large mass". Does the applicant intend to limit the weight of said

specimen receiving device? If so, large in mass relative to what? Or is the phrase referring to a separate large mass being associated with said device?

Claim Objections

6. Claim 4 is objected to because of the following informalities: claim 4 contains a typographical error the phrase "during of" is inappropriate and possibly "of" should be omitted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-6, ⁷8, 13-17, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5532874 issued to Stein.
3. Stein discloses a confocal microscope having a rotatable turntable mounting multiple samples (col. 1, lines 53-61).
4. Stein discloses scanning a sample with a light source (2) (col. 2, lines 16-31).
5. Specifically, Stein discloses a scanning device (16), which is rotatable (col. 2, lines 29-31) and a rotatable turntable (32) (col. 2, line 65-col. 3, line 2).
6. In regards to the ambiguity of claims 2 and 3, it understood that Stein's disclosure radial displacement reads on either direction and is not limited to both the

housing (30) and the turntable (32) moving in the same direction. Whereas, claim 3 is given the interpretation that axis (4) and (7) are the same or sufficiently similar.

7. As per claim 2, Stein discloses the capability of the microscope housing (30), which incorporates the scanning device (16), of radial displacement by the action of the arm (38)(col.3, lines 9-11). As mentioned, the scanning device (16) performs two-dimensional scanning (i.e. linearly displaceable).
8. As per claim 3, Stein discloses radial movement along an axis parallel to the optical axis (36) (col.3, lines 1-5).
9. As per claim 5, Stein discloses the definition of a constant rate of movement, which is control by a computer (col.3, lines 1-15).
10. As per claim 6, Stein discloses rotational speed coupled of acquired data (col.3, lines 43-67).
11. As per claim 7, to the extent as taught and understood, it is held to be inherent that Stein's turntable (32) would have ample mass as to facilitate the intention of the invention.
12. As per claim 8, Stein discloses the adaptability for one or more slides (4) (col.2, lines 65-67).
13. As per claim 13, Stein discloses automatic focusing (col.5, lines 16-25).
14. As per claim 14, Stein discloses a deviation of 5 microns (col.5, lines 25-31).
15. As per claim 15, Stein discloses a laser source (2) and photo detector (12) (col.2, line 18; col.2, line 57).
16. As per claim 16, Stein discloses two-dimensional scanning.

17. In fig. 1a, Stein discloses a scanning device (16) and a stationary laser (2), which reads on the limitations of claim 17.

18. In addition, fig. 1a depicts a non-zero laser incidence angle as recited in claim 21.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein.

21. In regards to claim 4, Stein explicitly discloses the claimed invention except for the optical distance being constant.

22. Stein teaches performing focusing for individual sample, which employs changing the distance between the sample and scanning device. However, Stein does not teach changing the distance while performing scanning operation.

23. Therefore, an ordinary skilled artisan would have obviously inferred from Stein's disclosure that said distance remains constant during relative motion between the scanning device and the specimen-receiving device.

24. Since, a general practice in the art is for the analysis to be carried out in one optimal focus distance for each specimen, an ordinary skilled artisan would have inferred this well expected method from Stein's disclosure.

25. As per claims 9-10, Stein teaches a carousel-type sample holder. It is not considered non-obvious to adapt said holder to be replaceable, since such inserts are common and well expected in the art.
26. In regards to the recitation of "individual sample holders", Stein discloses slide (4) or other object (see col.2, line 65). This disclosure reads on this limitation.
27. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein and in view of US Pat No 3,625,586 issued to Olexa.
28. Stein teaches the claimed invention except for a retaining means.
29. However, Olexa is relied upon to illustrate the widely known use of retaining means such as spring clamps (see col.2, lines 55-61 of Olexa). Olexa points out in col. 2, lines 60-61 that spring clamps (as depicted in applicant's fig.3) are well known and expected in the art.
30. Therefore, an ordinary skilled artisan would have obvious motivation to incorporate the teachings of Olexa into Stein's invention, since the use of spring clamps are well known in the art and flows from Olexa's disclosure.
31. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stein and in view of US Pat 4191940 issued to Polcyn et al.
32. Stein discloses the claimed invention except for a laser light of different wavelengths.
33. However, the use of such a laser light is well and expected in the art. Polcyn is relied upon to illustrate that the multiple wavelength laser light is well known (see col.3, lines 60-65). An ordinary skilled artisan would have known to incorporate such a laser

light from generally available knowledge in the art and Polcyn's disclosure of the advantageous technique of forming a characteristic map of a specimen (see abstract).

34. Claims 19-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein and in view of US Pat No 6248988 issued to Krantz.

35. Stein teaches the claimed invention except for the axial and lateral ranges recited and synchronization markers.

36. However, Krantz teaches common and well-expected laser dimensions (col.8, lines 25-33), that is a beam spot of less than $1\mu\text{m}$ and focus region of $100 \times 100\mu\text{m}$.

37. In addition, Krantz teaches markers for autofocussing (col.11, lines 45-47).

38. An ordinary skilled artisan would have found obvious motivation to incorporate the teachings of Krantz into Stein's invention, since Krantz discloses the advantages of multispot scanning (see col.3, lines 38-44).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalimah Fernandez whose telephone number is 703-305-6310. The examiner can normally be reached on Mon-Fri between 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Lee can be reached on 703-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

kf
January 25, 2002


JOHN R. LEE
PRIMARY EXAMINER